

Amendments To And Listing Of The Claims:

Please amend claims 1-36 as follows:

1. (amended) A packaging material which comprises:
a polymeric base component; and
a barrier component which coats and lines a surface of the base component, the barrier component inhibiting migration of gases, vapours and liquids through the base component, and the barrier comprising component being characterised in that it comprises a polymeric layer which coats and lines the surface of the base component, the polymeric layer comprising at least two different polymeric species which are polar and which are water soluble, the different species having different chemical compositions and being complementary in that they are bound together physically by interpolymer complexation to form an interpenetrating physical network which provides the barrier component.
2. (amended) A packaging material as claimed in Claim 1, which characterised in that it is in the form of a package or container.
3. (amended) A packaging material as claimed in Claim 2, which characterised in that the package or container is selected from the group consisting of capsules, blister packages, sachets, envelopes, jerry cans, bottles and jars.
4. (amended) A packing material as claimed in Claim 2 or Claim 3, which characterised in that it has an inner surface which is coated and lined by the barrier component.

5. (amended) A packaging material as claimed in ~~any one of Claims 2—4 inclusive,~~
~~which~~ characterised in that it has an outer surface which is coated and lined by the barrier
component.
6. (amended) A packaging material as claimed in ~~any one of Claims 1—5 inclusive,~~
characterised in which that the barrier component adheres to the base component
physically by electrostatic bonding.
7. (amended) A packaging material as claimed in ~~any one of Claims 1—6 inclusive,~~
characterised in which that the barrier component adheres to the base component chemically by
covalent bonding.
8. (amended) A packaging material as claimed in ~~any one of Claims 1—7 inclusive,~~
characterised in which that each barrier component has a surface remote from the base
component and having a protective coating thereon, on the opposite side of the barrier
component from the base component.
- 9 (amended) A packaging material as claimed in Claim 8, characterised in which that
the material of the protective coating is of a material selected from the group consisting of
thermosetting polymers, ultraviolet-curable polymers and thermoplastic polymers.
10. (amended) A packaging material as claimed in Claim 9, characterised in which that
the material of the protective coating is selected from the group consisting of the polymeric
material of the base component, polyurethanes, urethane acrylates, polyvinylidene chlorides,
polyacrylates, polyepoxides, polydimethyl siloxanes and copolymers of any two or more
thereof.
11. (amended) A packaging material as claimed in ~~any one of Claims 1—10 inclusive,~~
characterised in that it which is in the form of a bottle for use in the bottling of carbonated

drinks or beverages, there being a single barrier component which is located on the outer surface of the bottle, the base component comprising a polymeric plastics material selected from the group consisting of polyethylene terephthalates, polyethylene terephthalate glycols, polycarbonates, polystyrenes, polyamides, polybutylene terephthalates, polyethylene naphthalates, polyacrylonitriles, polymethyl pentenes, polyvinyl chlorides, polyethylenes, polypropylenes, polybutylenes and copolymers of any two or more thereof.

12. (amended) A packaging material as claimed in ~~any one of Claims 1—11 inclusive,~~ characterised in which that the complementary species of the barrier component are selected from the group consisting of polyvinyl alcohols, polyvinyl amines, polyvinyl imines, polyvinyl acetates, polyglycols, polyacrylic acids, polyalkylacrylic acids, polyacrylamides, polyalkyl acrylamides, polyvinyl pyrrolidones, polylactides, polyanhydrides, polyamides, celluloses, pectins, proteins, gums, hydroxymethyl celluloses, carboxymethyl celluloses, hydroxyethyl starches, carboxymethyl starches, cellulose acetates, cellulose acetate butyrates, cellulose acetate propionates and copolymers of any two or more thereof.

13. (amended) A packaging material as claimed in ~~any one of Claims 1—11 inclusive,~~ in which the complementary species of the barrier component are selected from polyvinyl alcohols and polymethyl vinyl ether/ malefic acid copolymers.

14. (amended) A packaging material as claimed in ~~any one of Claims 1—13 inclusive,~~ characterised in which that the complementary species of the barrier component each have a molecular mass in the range 4 000 - 100 000 g/mol, the major proportion of the molecules thereof having molecular masses falling within this range.

15. (amended) A packaging material as claimed in Claim 14, characterised in which that the molecular mass range is 28 000 - 76 000 g/mol.

16. (amended) A packaging material as claimed in ~~any one of Claims 1—15 inclusive~~, characterised in which ~~that~~ the surface of the base component, where it is coated and lined by the barrier component, is activated by a technique selected from the group consisting of oxyfluorination, flame treatment, plasma treatment, and combinations of any two or more thereof.

17. (amended) A process for producing a packaging material which comprises a polymeric base component and a barrier component which coats and lines a surface of the base component, the barrier component inhibiting migration of gases, vapours and liquids through the base component, the process ~~being characterised in that~~ it comprises the step of coating at least one surface of the base component with a barrier component in the form of a polymeric layer which comprises at least two complementary polymeric species which are polar and water soluble, and have different chemical compositions, the layer lining the base component and the coating step causing the complementary species to interact together physically by interpolymer complexation to form an interpenetrating physical network which provides the barrier component.

18. (amended) A process as claimed in Claim 17, which ~~characterised in that it~~ includes the step of shaping the base component into a package or container.

19. (amended) A process as claimed in Claim 18, ~~characterised in~~ which ~~that~~ the coating step takes place after the step of shaping the base component into a package or container.

20. (amended) A process as claimed in Claim 18 ~~or Claim 19~~, characterised in which ~~that~~ the coating step takes place on an inner surface of the package or container.

21. (amended) A process as claimed in ~~any one of Claims 18—20 inclusive~~, characterised in ~~which~~that the coating takes place on an outer surface of the container.
22. (amended) A process as claimed in ~~any one of Claims 17—21 inclusive~~, characterised in ~~which~~that the coating step comprises physically adhering the barrier component to the base component by electrostatic bonding.
23. (amended) A process as claimed in ~~any one of Claims 17—22 inclusive~~, characterised in ~~which~~that the coating step comprises chemically adhering the barrier component to the base component by covalent bonding.
24. (amended) A process as claimed in ~~any one of Claims 17—23 inclusive~~, characterised in ~~that it~~ which includes the step, after the coating of the base component with each barrier component, of providing a protective coating on the opposite side of each barrier component from the base component, remote from the base component.
25. (amended) A process as claimed in ~~any one of Claims 17—24 inclusive~~, characterised in ~~that it~~ which includes the step of selecting the material of the protective coating from the group consisting of thermosetting polymers, ultraviolet-curable polymers and thermoplastic polymers.
26. (amended) A process as claimed in ~~any one of Claims 17—25 inclusive~~, characterised in ~~that it~~ which includes the step of selecting the material of the protective coating from the group consisting of the polymeric material of the base component, polyurethanes, urethane acrylates, polyvinylidene chlorides, polyacrylates, polyepoxides, polydimethyl siloxanes and copolymers of any two or more thereof.
27. (amended) A process as claimed in ~~any one of Claims 17—26 inclusive~~, characterised in ~~that it~~ which includes the step of selecting the base component from materials

of the group consisting of polyethylene terephthalates, polyethylene terephthalate glycols, polycarbonates, polystyrenes, polyamides, polybutylene terephthalates, polyethylene naphthalates, polyacrylonitriles, polymethyl pentanes, polyvinyl chlorides, polyethylenes, polypropylenes, polybutylenes and copolymers of any two or more thereof.

28. (amended) A process as claimed in ~~any one of Claims 17—27 inclusive~~, ~~characterised in that it~~ which includes the step of selecting each of the complementary species of the barrier component from the group consisting of polyvinyl alcohols, polyvinyl amines, polyvinyl imines, polyvinyl acetates, polyglycols, polyacrylic acids, polyalkylacrylic acids, polyacrylamides, polyalkyl acrylamides, polyvinyl pyrrolidones, polylactides, polyanhydrides, polyamides, celluloses, pectins, proteins, gums, hydroxymethyl celluloses, carboxymethyl celluloses, hydroxyethyl starches, carboxymethyl starches, cellulose acetates, cellulose acetate butyrates, cellulose acetate propionates and copolymers of any two or more thereof.

29. (amended) A process as claimed in ~~any one of Claims 17—27 inclusive~~, ~~characterized in that it~~ which includes the step of selecting each of the complementary species of the barrier component from the group consisting of polyvinyl alcohols and polymethyl vinyl ether/ maleic acid copolymers.

30. (amended) A process as claimed in Claim 28 ~~or Claim 29~~, ~~which~~ characterised in that it includes the step of selecting each of the complementary species of the barrier component to have a molecular mass in the range 4 000 -100 000 g/mol, the major proportion of the molecules thereof having molecular masses falling within this range.

31. (amended) A process as claimed in Claim 30, ~~characterised in~~ which ~~that~~ the molecular mass range is 28 000 - 76 000 g/mol.

32. (amended) A process as claimed in ~~any one of Claims 17—31 inclusive,~~
~~which~~ characterised in that it includes the step, prior to the coating of the base component with
the barrier component, of activating the surface of the base component.

33. (amended) A process as claimed in Claim 32, characterised in ~~which~~ that the step of
activating the surface of the base component includes physically activating said surface, by
subjecting it to an activation technique selected from roughening or abrading, ultraviolet
radiation treatment, gamma radiation treatment, flame treatment, plasma treatment and
combinations of two or more thereof.

34. (amended) A process as claimed in Claim 32 ~~or Claim 33,~~ characterised in
~~which~~ that the step of activating the surface of the base component includes chemically
activating said surface, by subjecting it to an activation technique selected from etching, ozone
treatment, fluorine treatment, chlorine treatment, oxidising treatment and combinations of any
two or more thereof.

35. (amended) A process as claimed in Claim 34, characterised in ~~which~~ that the
activation step is selected from the step of oxidising by means of a strong oxidising agent
selected from potassium peroxodisulphate, azoisobutyronitrile, potassium permanganate, the
step of fluorinating, the step of oxyfluorinating and combinations of any two or more said
steps.

36. (amended) A process as claimed in ~~any one of Claims 17—32 inclusive,~~
~~characterised in which~~ that the coating of the base component surface with the barrier
component is by forming a mixture which is a solution of the complementary species of the
barrier component in a solvent, coating the base component with the solution, and removing
the solvent from the coating to dry the coating.